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United States Patent [19][11] **Patent Number:** **5,504,068****Komiya et al.**[45] **Date of Patent:** **Apr. 2, 1996**[54] **TOPICAL PREPARATIONS CONTAINING
CYCLOSPORIN**[75] Inventors: **Katsuo Komiya**, Tokyo; **Rie Igarashi**;
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Kunio Ando, Kawasaki, all of Japan[73] Assignee: **LTT Institute Co., Ltd.**, Japan[21] Appl. No.: **975,548**[22] PCT Filed: **Jun. 22, 1992**[86] PCT No.: **PCT/JP92/00798**§ 371 Date: **Feb. 23, 1993**§ 102(e) Date: **Feb. 23, 1993**[87] PCT Pub. No.: **WO93/00106**PCT Pub. Date: **Jan. 7, 1993**[30] **Foreign Application Priority Data**

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[51] **Int. Cl.⁶** **A61K 38/13**[52] **U.S. Cl.** **514/11; 514/885**[58] **Field of Search** **514/885, 886,**
514/887, 11[56] **References Cited****U.S. PATENT DOCUMENTS**

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Primary Examiner—Marianne M. Cintins*Assistant Examiner*—P. G. Spivack*Attorney, Agent, or Firm*—Lorusso & Loud[57] **ABSTRACT**

A topical preparation containing cyclosporin as an active ingredient, is disclosed that contains (a) cyclosporin; (b) an organic solvent for dissolving the cyclosporin; (c) an ester of a fatty acid with a monovalent alcohol having a total number of carbon atoms of 8 or more and/or an alkanol amine, each being in liquid state at 25°C; (d) an oily substance in solid state at 25°C; and (e) a surfactant. The cyclosporin is present in a concentration ranging from approximately 0.1% to 10% by weight and the ester and/or alkanol amine are/is present in a concentration ranging from approximately 1% to 15% by weight. The topical preparations are active against atopic dermatitis, psoriasis and allergic contact dermatitis.

19 Claims, No Drawings